ACN: 624422 (11 of 66) Time / Day Date: 200407 Local Time Of Day: 0001-0600

PI ace

Local e Reference. Airport : RNT. Airport

State Reference : WA Relative Position. Distance. Nautical Miles : 0

Altitude. AGL. Single Value: 0

Environment

Flight Conditions : VMC Weather Elements / Visibility. Visibility : 50

Light : Dawn

Ceiling. Single Value: 25000

Ai rcraft

Reference: X

Aircraft Operator : Personal Make Model Name : Skylane 182/RG Turbo Skylane/RG Crew Size. Number Of Crew : 1

Operating Under FAR Part: Part 91

Flight Plan : None Mission: Passenger Flight Phase : Parked Flight Phase : Takeoff Airspace. Class G: RNT. G

Person: 1

Reference : 1 Location Of Person Aircraft : X Reporter Organization : Personal Function Flight Crew : Pilot Flying Function. Flight Crew: Single Pilot Qualification. Flight Crew: Multiengine Qualification. Flight Crew: Commercial Qualification. Flight Crew: Instrument Experience. Flight Crew. Total: 1450
Experience. Flight Crew. Last 90 Days: 50
Experience. Flight Crew. Type: 1250 ASRS Report Number. Accession Number: 624422

Person: 2

Reference:

Location Of Person. Aircraft : X

Function. Other

Anomaly. Deviation - Procedural : Published Material / Policy

Anomaly. Ground Event / Encounter: Other / Unknown Anomaly. Inflight Event / Encounter: Unstabilized Approach Detector. Person: Flight Crew Result. General: None Reported / Taken

Assessments

Environment - Non Weather Related

Contributing Factors / Situations : Environment - Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Aircraft

Primary Problem : Human Factors

I WAS IN THE MIDDLE OF PREFLTING THE ACFT AND WHILE AT THE TAIL OF THE ACFT THE PAX ARRIVED, WHOM I HAD TO LET IN THE GATE. I LET HIM IN AND RETURNED TO PREFLTING THE ACFT BEGINNING WHERE I LEFT OFF, AT THE TAIL. DAWN WAS ARRIVING AND I WAS ABLE TO SEE EVERYTHING THOUGH I DID USE A FLASHLIGHT TO LOOK AT A COUPLE OF BOLTS IN THE TAIL, AS WELL AS THE TACHOMETER READING. I DID NOT SEE THE TAIL TIED DOWN TO A BLACK TIRE FILLED WITH CEMENT BENEATH THE TAIL AND THE ANCHOR ROPE WAS DARK GREY AND NEARLY INVISIBLE IN THE AVAILABLE LIGHT. I HAD LOOKED UNDERNEATH THE ELEVATORS BUT MISSED THE TIEDOWN ROPE. THIS WAS EXACTLY WHERE I HAD BEEN INTERRUPTED. ENG STARTED FINE, BUT I NOTED A BIT MORE RESISTANCE THAN USUAL TO BEGINNING TO ROLL. I VERIFIED THE CHOCKS WERE OUT OF THE WAY AND ADDED A BIT MORE PWR AND THE ACFT ROLLED RELATIVELY EASILY. RUN-UP WAS UNREMARKABLE. THERE WAS A HEADWIND ON RWY 33 AND THE TWR WAS NOT OPERATIONAL WHEN WE TOOK OFF HEADED N. UPON LIFTING OFF THERE WERE SOME RATHER SIGNIFICANT 'BUMPS' THAT FELT LIKE TURB. THE PAX REMARKED THAT IT WAS 'BOUNCIER' THAN USUAL. ONCE AIRBORNE, HOWEVER, THE ACFT DEVELOPED AN OSCILLATION THAT WAS IMPOSSIBLE TO TRIM OUT. THE MISSION WAS TO FLY LOW, IE, BELOW 1000 FT, IN ORDER TO PERFORM SOME SURVEY WORK. THE PAX SET ABOUT HIS APPOINTED TASK AND THE FLT PROCEEDED BUT WITH CONTINUOUS OSCILLATIONS. ACFT CTL WAS NOT DIFFICULT AND I TRIMMED IT UP WITH 20 DEG FLAPS, 18 INCHES MP, 2350 RPM AND FLEW THE MISSION AT 80 MPH WITHOUT ANY OTHER DIFFICULTIES. THE OSCILLATIONS SEEMED TOO REGULAR TO BE RELATED TO THE WIND, HOWEVER, THERE WAS A BIT OF A DEPORT OF THE WIND, HOWEVER, THERE WAS A BIT OF A DEPORT OF THE WIND, HOWEVER, THERE WAS A BIT OF A I WAS IN THE MIDDLE OF PREFLTING THE ACFT AND WHILE AT THE TAIL OF THE ACFT THE SEEMED TOO REGULAR TO BE RELATED TO THE WIND, HOWEVER, THERE WAS A BIT OF A BREEZE. EVERYTHING ELSE SEEMED FINE. WE RETURNED FOR LNDG AND I ELECTED TO DO A STRAIGHT IN LNDG BACK TO THE S BECAUSE OF A SHALLOWER APCH. THERE ARE NO OBSTRUCTIONS AT THE N END OF THE FIELD BUT THERE ARE BUILDINGS AND A BLAST FENCE AT THE S END AND I PREFERRED A DOWNWIND, UNOBSTRUCTED LNDG IN THE EVENT THE OSCILLATIONS WORSENED NEAR THE GND. I LANDED LONG AND JUST ABOVE FLARE THE ACFT BEGAN PITCHING MORE NOTICEABLY AND AT FLARE I WAS MOVING AT ABOUT 65 MPH. AT THAT MOMENT THE ACFT SUDDENLY DROPPED ONTO THE TARMACK WITH A RATHER HARD LNDG. NOTHING WAS DAMAGED. I TAXIED THE ACFT BACK TO ITS TIEDOWN SPACE AND UPON LNDG. NOTHING WAS DAMAGED. I TAXIED THE ACFT BACK TO ITS HEDOWN SPACE AND UPON EXITING THE ACFT NOTED A TIEDOWN ROPE HANGING FROM THE TAIL TIEDOWN RING. THE TIRE THAT HAD BEEN THERE WAS MISSING. I SEARCHED THE RWY AND DISCOVERED THE TIRE ABOUT 2/3 OF THE WAY DOWN THE RWY, ALONG WITH A FRAYED PIECE OF TIEDOWN ROPE. OBVIOUSLY, I HAD TAKEN OFF WITH A 100-150 LB CEMENT-FILLED TIRE ATTACHED TO THE REARMOST TIEDOWN RING. THIS STATION MEASURES 228 INCHES FROM THE FIREWALL (THE DATUM IN THIS ACFT). THIS RESULTED IN AN ADDITIONAL MOMENT OF 22800 LBS TO 34200 LBS. THE GROSS WT WAS 2676-2726 LBS WITH CORRESPONDING TOTAL MOMENTS OF 120266 TO 131666 LBS (ADDING 100-150 LBS, RESPECTIVELY). AMAZINGLY, THIS DID NOT PUT THE ACFT CTR OF GRAVITY OUT OF THE ENVELOPE, WHICH PROBABLY FYPLAINS WHY I DIDN'T HAVE MUCH DIFFICULTY IN CTLING THE ACFT. IT ALSO ADDS TO THIS DID NOT PUT THE ACFT CTR OF GRAVITY OUT OF THE ENVELOPE, WHICH PROBABLY EXPLAINS WHY I DIDN'T HAVE MUCH DIFFICULTY IN CTLING THE ACFT. IT ALSO ADDS TO MY RESPECT FOR THE C182 MODEL, NOTWITHSTANDING THE FACT THAT MISSING THIS ITEM ON A PREFLT CHKLIST IS INEXCUSABLE. FORTUNATELY, THE TIRE STAYED WITH THE ACFT UNTIL LNDG BECAUSE IT COULD HAVE DONE REAL DAMAGE TO PROPERTY AND OR SOMEONE'S LIFE HAD IT LANDED IN THE WRONG SPOT. LESSONS LEARNED: FIRST: DON'T LET ANYTHING DISRUPT PREFLT. WHEN THERE IS AN INTERRUPTION, DEVISE A WAY TO EARMARK WHERE THE INTERRUPTION OCCURRED. ON RESUMING, BACK UP A COUPLE OF STEPS AND REPEAT THEM TO MAKE SURE NOTHING LIKE THIS GETS MISSED. SECONDLY: IF ANYTHING SEEMS ODD OR UNEXPECTED, ABORT THE TKOF ROLL AND INVESTIGATE. I SUSPECTED WINDS AS THE INITIAL CAUSE AND FORCED THE PLANE INTO THE AIR, ONLY TO BE CONFRONTED WITH A CONTINUED OSCILLATION THAT I COULD NOT EXPLAIN. THAT ALONE SHOULD HAVE PROMPTED A RETURN TO THE FIELD AND AN INVESTIGATION. THE CAUSE WOULD HAVE BEEN FOUND MUCH FARILER AND REMEDIED. IN RETROSPECT. I CAN NOW APPRECIATE THAT THE FOUND MUCH EARLIER AND REMEDIED. IN RETROSPECT, I CAN NOW APPRECIATE THAT THE OSCILLATIONS FELT EXACTLY LIKE WHAT I WOULD EXPECT OF A SWINGING 100 LB STONE ON THE TAIL.

## Synopsi s

C182 PLT TAXIES, TAKES OFF, FLIES, AND LANDS WITH 100+ LBS CEMENT TIEDOWN WT ATTACHED TO THE TAIL OF THE ACFT.